

# Projectable

---

## Assessment: Full Stack Application - Part A

**Team: Felix Mckenzie & Robert Neville**

## Projectable Description

### Purpose:

Visual representation is vital when planning a project in a team setting as it conveys high level information to all involved. A Project Manager is responsible for taking a project from ideation to completion, and navigating the team through every step and problem in-between. Many Project Managers are faced with new challenges in today's post-pandemic world, now trying to lead their teams and projects through a completely remote, work-from-home environment. Moreover, it seems remote work is here to stay: 74% of professionals expect remote work to become standard, with 97% not wanting to return to the office full-time (Prossack, 2021). How can teams achieve the same level of success in a distributed workforce?

Task management and communication is central to the success of any Project Manager and team. Projects are made up of dozens of tasks each with their own level of difficulty and time requirements. 77% of high-performing projects use project management software, yet only 22% of organizations actually make the investment (TeamStage, 2020).

While several project management tools exist on the market, many have been met with criticism from users. Existing tools such as Jira are feature rich, however can be complicated to use, with unintuitive workflows and slow load times, and most importantly no dark mode. Simpler alternatives, such as Trello and Asana, provide a lower barrier to entry, however are capped by a paywall once you reach their free tier limit.

Projectable is a lightweight, project management application that helps teams of any size and type collaborate and track the progress of their work. Projectable is a free, open source alternative that puts user experience first.

### Features/Functionality:

- Register and Login via firebase authentication
- Toggle light and dark mode
- Track progress of tasks and projects on the dashboard home screen.
- A calendar view tracks task due dates
- Create and manage projects
- Create and manage project tasks
- Collaborate by adding team members to projects
- Provide feedback to team members through comments
- Assign tasks to members
- Assign priority to tasks

### Target Audience

The app is intended for Project Managers, teams and individuals wanting to manage projects of all scales

# Tech Stack

## Frontend

- React
- Tailwind

## Backend

- Express
- Node.js
- MongoDB

## Third-Party Services

- MongoDB Atlas
- Firebase Authentication

## User Stories

As Jenny, A Team Lead, I want a project management application, that allows me to securely register and login with email and password. So only I have access to my projects stored on the application.

As Max, A Project Manager, I'm currently lacking visibility across all my projects. I would like a tool that allows me to plan and manage all of my team's projects in one place, so that I know how many projects I have, what each includes and when each is happening.

As Joe, A Project Manager, I want to be able to create tasks for a project, So my team can easily visualize all the requirements necessary to complete a project.

As Emma, A Frontend Developer, During a project, plans and requirements often change to meet the client needs, I want to be able to update and delete tasks to reflect the current state of the project.

As Michael, A Frontend Developer on a team, when working on a project I want to be able to view a task's priority status, so I know what tickets will make the most impact with achieving the project goals.

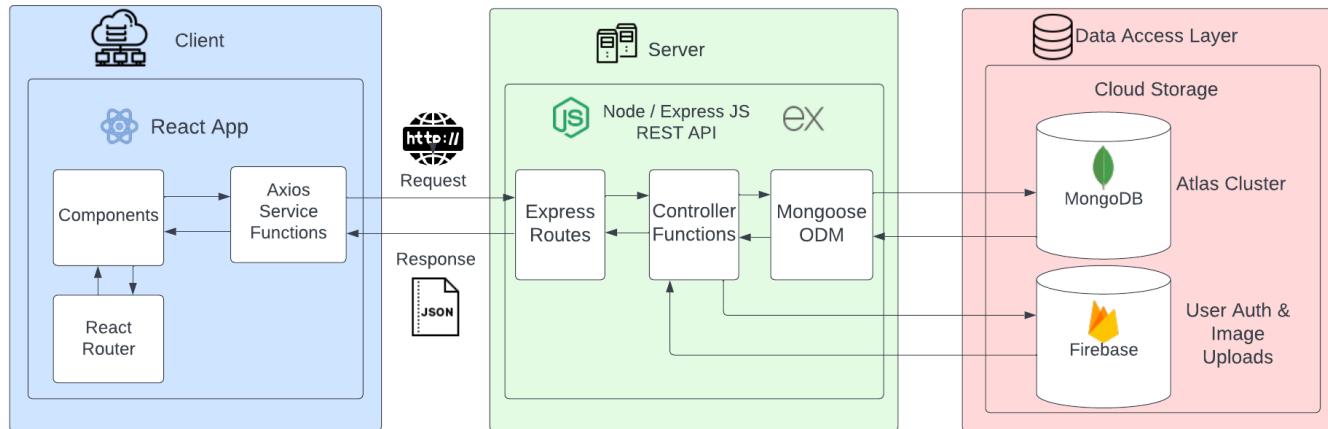
As Jane, a Backend Developer, I'm often working across multiple projects with multiple teams. I want to receive notifications in a central location, when someone comments on a project task that's assigned to me.

As Sarah, A Product Manager, When working on a project, I want to be able to track each team member's workload by how many tasks are assigned to an individual, so I can gauge each team member's work capacity.

As Lisa, A freelance Web Developer, I want to be able to set due dates for projects, so I can manage my workload and stay on track with client requests.

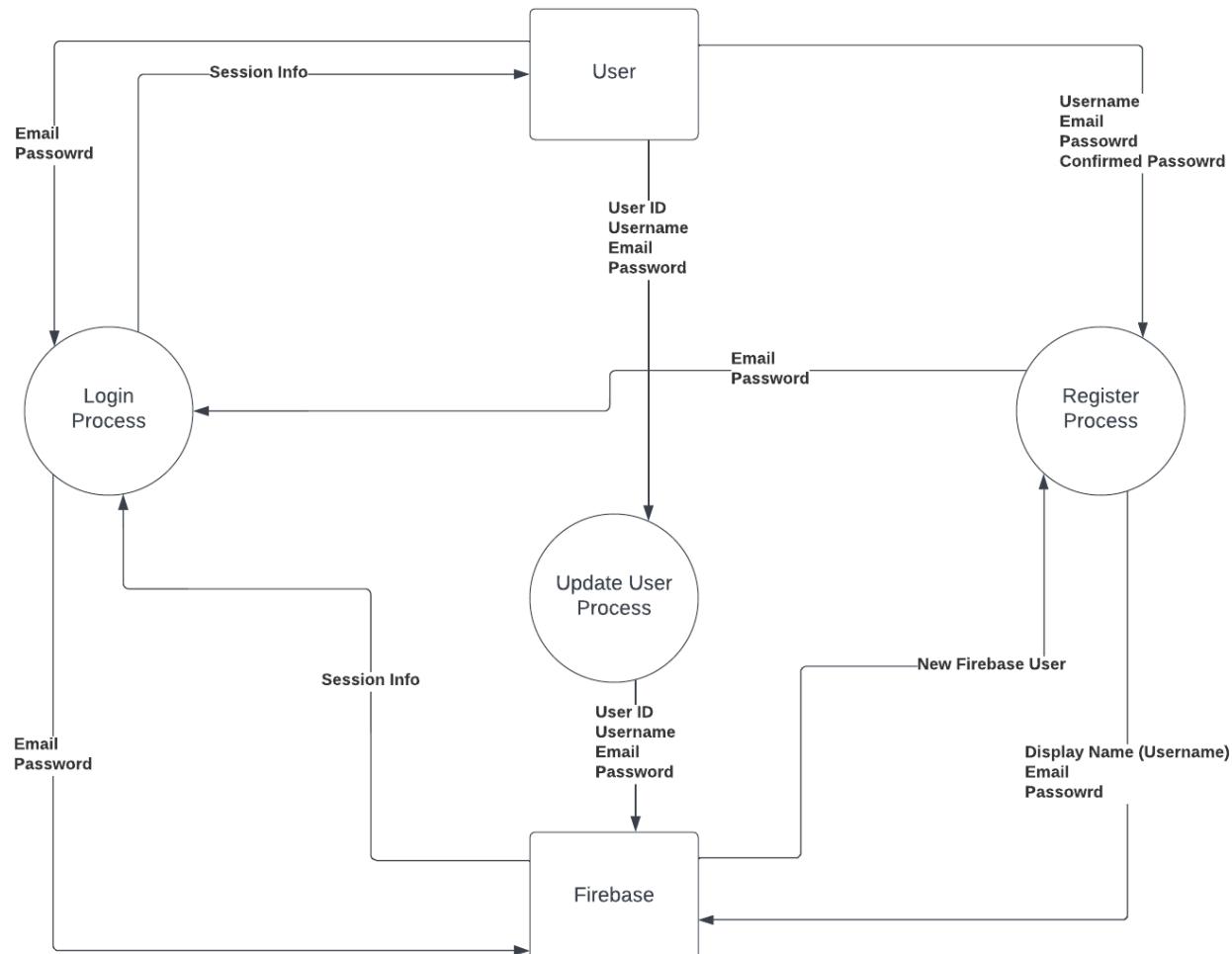
As George, a UX/UI Designer, I want to be able to comment on project tasks that are assigned to fellow team members, so I can know how a task is progressing and provide feedback to the developers on my team.

## Application Architecture Diagram

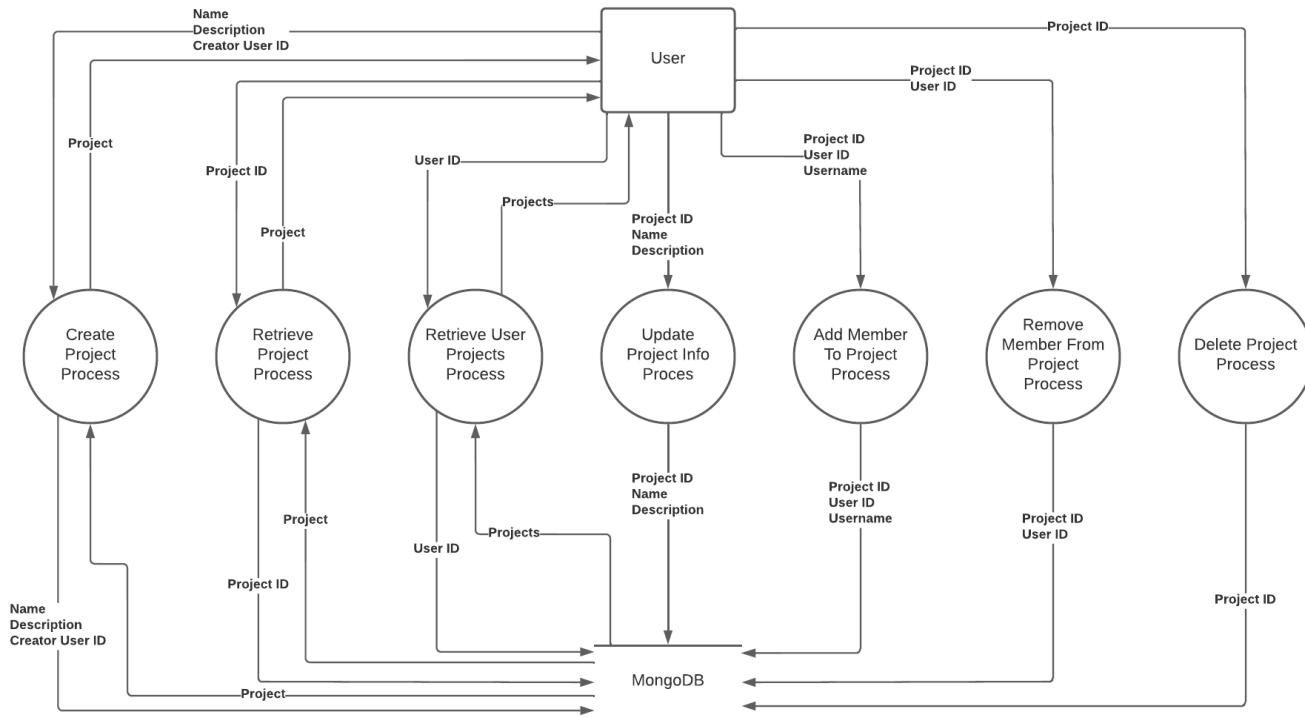


## Data Flow Diagrams

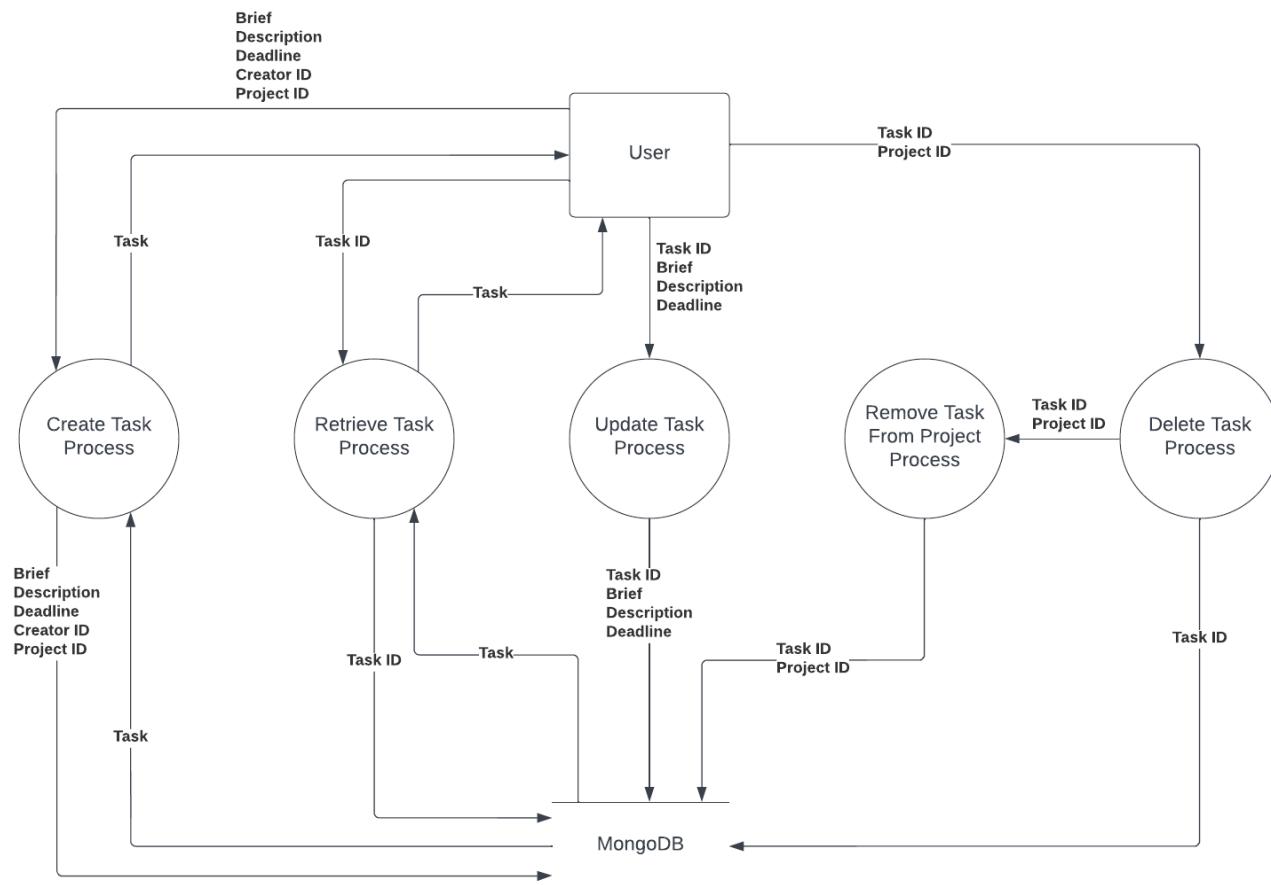
### The Authentication System



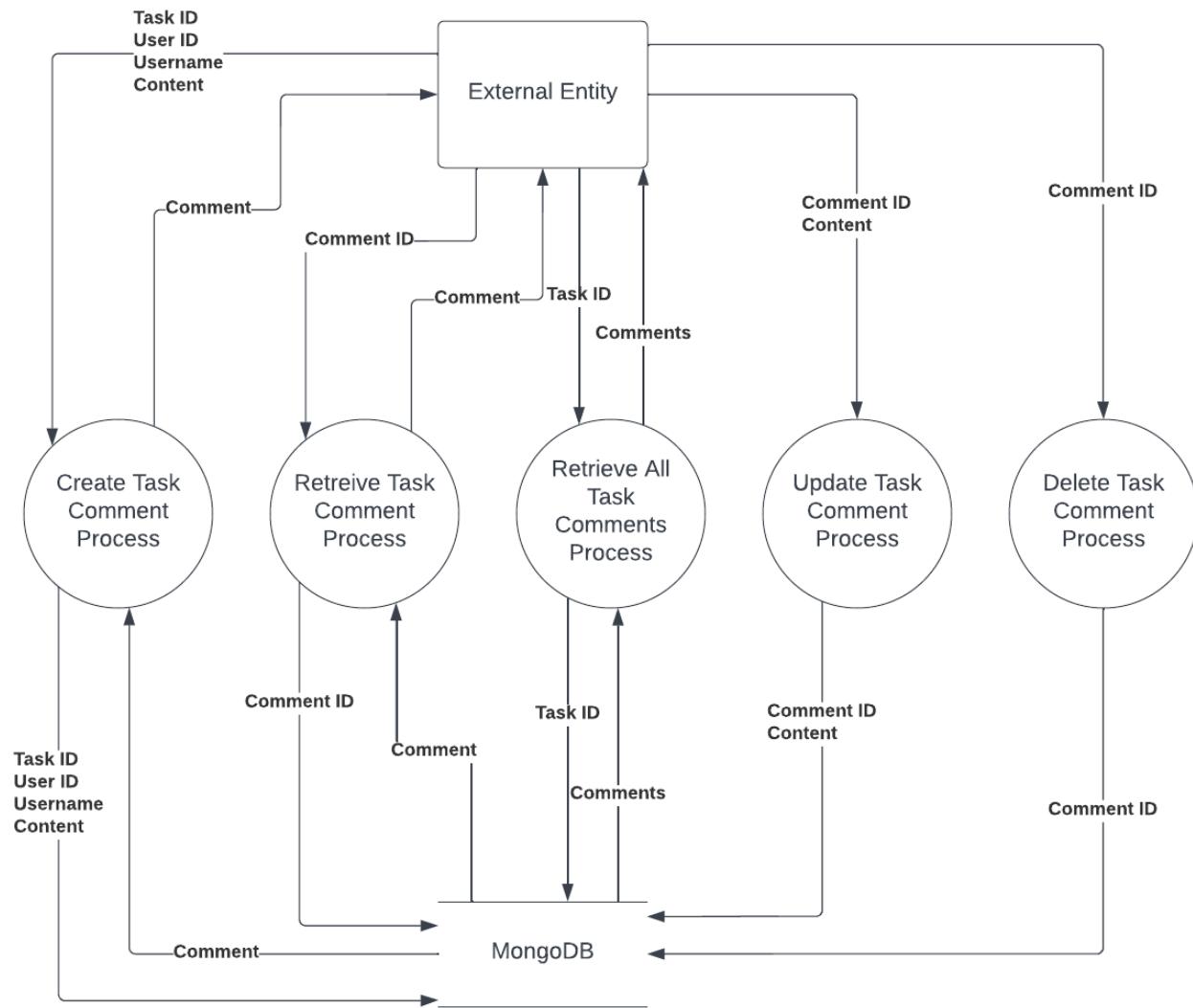
### The Projects Subsystem



## The Tasks SubSystem



## The Task Comments Subsystem



## Wireframes

The Projectable UI has been designed with a desktop first approach. However, the UI will be responsive to tablet and mobile - using the same layout. With careful application of a grid based layout and flex content, all UI elements will resize to fit cleanly in the same format on all device types.

Both the dashboard and project views feature a left side bar that acts as a tab bar for navigation between the various subviews. This sidebar will be sized so that it does not take up too much valuable space on mobile devices, and all project, task, and member cards will retain their layout - relying on text wrapping to accommodate for reduced space on smaller screens.

Hence, only desktop wireframes have been included in this documentation.

## Notifications, Calendar & Stats

Icons have been included in the dashboard sidebar for notifications, calendar, and stats. These features are considered outside the scope of Projectable's MVP. However, the icons have been included in the wireframes for completeness (it will be apparent that no DFDs are present for any of these subsystems).

## Dashboard and Project View Layout

The dashboard and project view will make judicious use of space, with a thin left sidebar (no more than 40-50px wide) to be present on all device types, acting as a navigational mechanism (like a tab bar) for all content subviews.

Each subview will contain an heading with bottom border, to indicate to the user the nature of the current section. For this project, the team has decided to take card-based approach to displaying projects, notifications, tasks, etc., which will have horizontally oriented content.

The sidebar is to be fixed to the viewport, with subview content vertically scrollable.

## Dot Menus

All actions associated with the entities represented by UI cards are to be available through 'dot' menus. Such menus have become somewhat of an industry standard and provide a more intuitive workflow, which preserves valuable space - the actions are closely associated with each entity's UI representation, and are only visible on the screen when needed.

## Sign Up / Log In

These views serve as the entry points to the UI, they will be minimal and all content is to be centered (it has become standard to keep login pages clean, with only necessary info and controls - often centered).



# PROJECTABLE

## Sign Up

First Name

Last Name

Username

Email

Password

Confirm Password

Clear

Submit

Already have an account? [login](#)

# PROJECTABLE

# Login

Email

Password

[Clear](#)

[Submit](#)

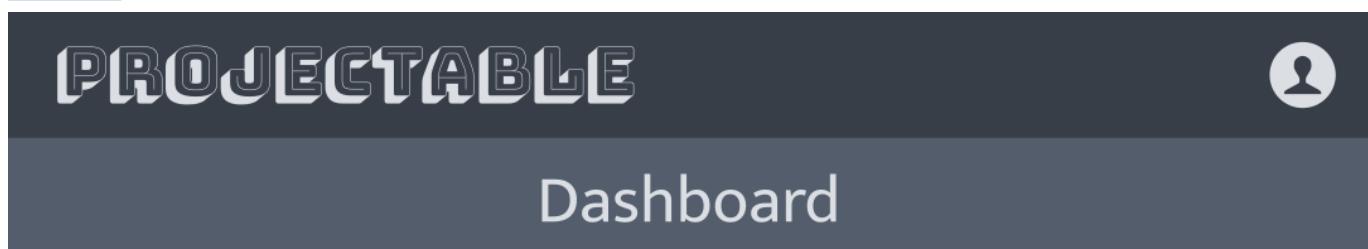
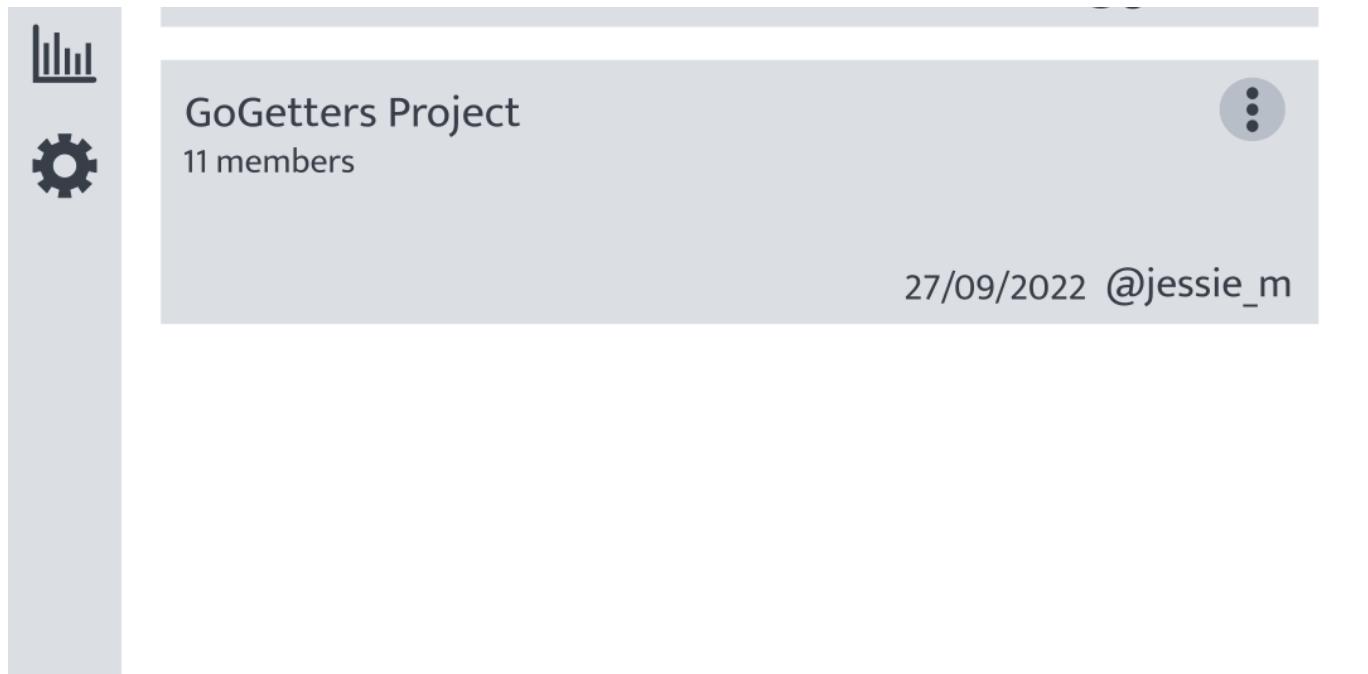
Don't have an account? [sign up](#)

Dashboard Views



The screenshot shows the Projectable app interface. At the top, the word "PROJECTABLE" is displayed in a large, stylized font. In the top right corner, there is a user icon. Below the main title, the word "Dashboard" is centered. On the left side, there is a vertical sidebar with several icons: a bell, a list, a folder, a calendar (showing the number 21), a chart, and a gear. The main content area is titled "My Tasks". Inside this section, there is a card for a task titled "Update user menu icon" under the project "GoGetters Project". To the right of the task title is a three-dot menu icon. Below the task title, the timestamp "14:32 27/10/2022" and the username "@jessie\_m" are shown.

The screenshot shows the Projectable app interface. At the top, the word "PROJECTABLE" is displayed in a large, stylized font. In the top right corner, there is a user icon. Below the main title, the word "Dashboard" is centered. On the left side, there is a vertical sidebar with several icons: a bell, a list, a folder, a calendar (showing the number 21), a chart, and a gear. The main content area is titled "Projects". Inside this section, there is a card for a project titled "HumDrum Project" with "5 members". To the right of the project title is a three-dot menu icon. Below the project title, the timestamp "27/10/2022" and the username "@genevieve" are shown. In the top right corner of the main content area, there is a "New" button.



The screenshot shows the "Settings" screen of the Projectable app. The title "Settings" is at the top, followed by a horizontal line. Below the title, there are four items: "Set Theme" with a paint palette icon, "Change Avatar" with a person icon, "Edit Info" with a pencil icon, and "Change Password" with a lock icon. A vertical sidebar on the left contains icons for notifications, settings, files, calendar, charts, and user profile.

## Project Views

The project settings view will only be accessible by the creator/owner of a project.

The screenshot shows the PROJECTABLE application interface. At the top, there is a dark header with the PROJECTABLE logo on the left and a user icon on the right. Below the header, the title "GoGetters Project" is displayed. On the left side, there is a vertical sidebar with four icons: a list icon, a person icon, a checkmark icon, and a gear icon. The main content area has a heading "Unassigned Tasks" with a "New" button. There are two task cards: one for "Design sign up frame" and another for "Implement sign up fame component". Each task card includes a timestamp ("14:32 27/10/2022") and a handle ("@jessie\_m"). To the right of each task card is a circular menu icon with three dots.

PROJECTABLE

GoGetters Project

Unassigned Tasks New

Design sign up frame

14:32 27/10/2022 @jessie\_m

Implement sign up fame component

14:32 27/10/2022 @jessie\_m

# PROJECTABLE



## Parsley Project

**Members**

-  Jessie Rocket  
@jessie\_m 20 tasks
-  James Rocket  
@splendid\_james 5 tasks
-  Meowth Rocket  
@meowth 500 tasks

The screenshot shows the Projectable app interface. At the top, there's a dark header bar with the word "PROJECTABLE" in large white letters and a user icon in a circle on the right. Below the header is a dark grey navigation bar with the project name "Parsley Project" in white. On the far left, there's a vertical sidebar with four icons: a list icon, a person icon, a checked box icon (which is highlighted in grey), and a gear icon. The main content area has a light grey background. It displays a single task card for "Decide on a team name". The task title is in bold black text. Below it, the completion status "Completed by @meowth" and the timestamp "11:11 01/01/2022" are shown. To the right of the task details, another timestamp "10:00 01/01/2022" and a handle "@jessie\_m" are visible, likely indicating a comment or update.

# PROJECTABLE

## Parsley Project

### Completed Tasks

Decide on a team name

Completed by @meowth  
11:11 01/01/2022

10:00 01/01/2022 @jessie\_m

The screenshot shows the Projectable app interface. At the top, there's a dark header with the word "PROJECTABLE" in large white letters and a user icon. Below the header, the project name "GoGetters Project" is displayed. On the left, a vertical sidebar contains four icons: a list, a person, a checkmark, and a gear. The main content area is titled "Settings" and includes four buttons: "Add Member", "Remove Member", "Edit Project Info", and "Delete Project". The "Delete Project" button is highlighted with a red border.

New Project Modal

The screenshot shows a "New Project" modal window. It has a close button (an 'X') in the top right corner. The title "New Project" is centered at the top. Below the title, there are two input fields: one labeled "Name" with a placeholder "Project Name" and another labeled "Description" with a placeholder "Project Description".

## Description

Cancel

Submit



## New Task

---

Brief

Description

Deadline

Cancel

Submit

[View Task Modal](#)



## Fix carousel margin & padding

16:39 30/10/2022

The members carousel needs a greater margin on top and bottom, and the carousel content would look better if padded on all sides by 1em (like the rest of the components in the project view).

@jessie\_m

[View Project](#)

## Activity

---



Hey Jess. Totally agree. I'm on it!

@splendid\_james 16:52 30/10/2022



Thanks, James :)

@jessie\_m 16:55 30/10/2022



View Members Modal



Meowth Rocket  
@meowth

Create git repo for... @splendid\_james

Update dependenc... @splendid\_james

Finish wireframes

@jessie\_m

Edit Project Modal

Edit GoGetters Project



## Name

GoGetters

## Description

The GoGetters just want to dominate the Pokeverse.  
Give us a break!

Cancel

Submit

## Add Member Modal

## Add Member

---



Username

CancelSubmit

Remove Member Modal

## Remove Member

---



### Members

meowth

splendid\_james

jessie\_m

Cancel

Submit

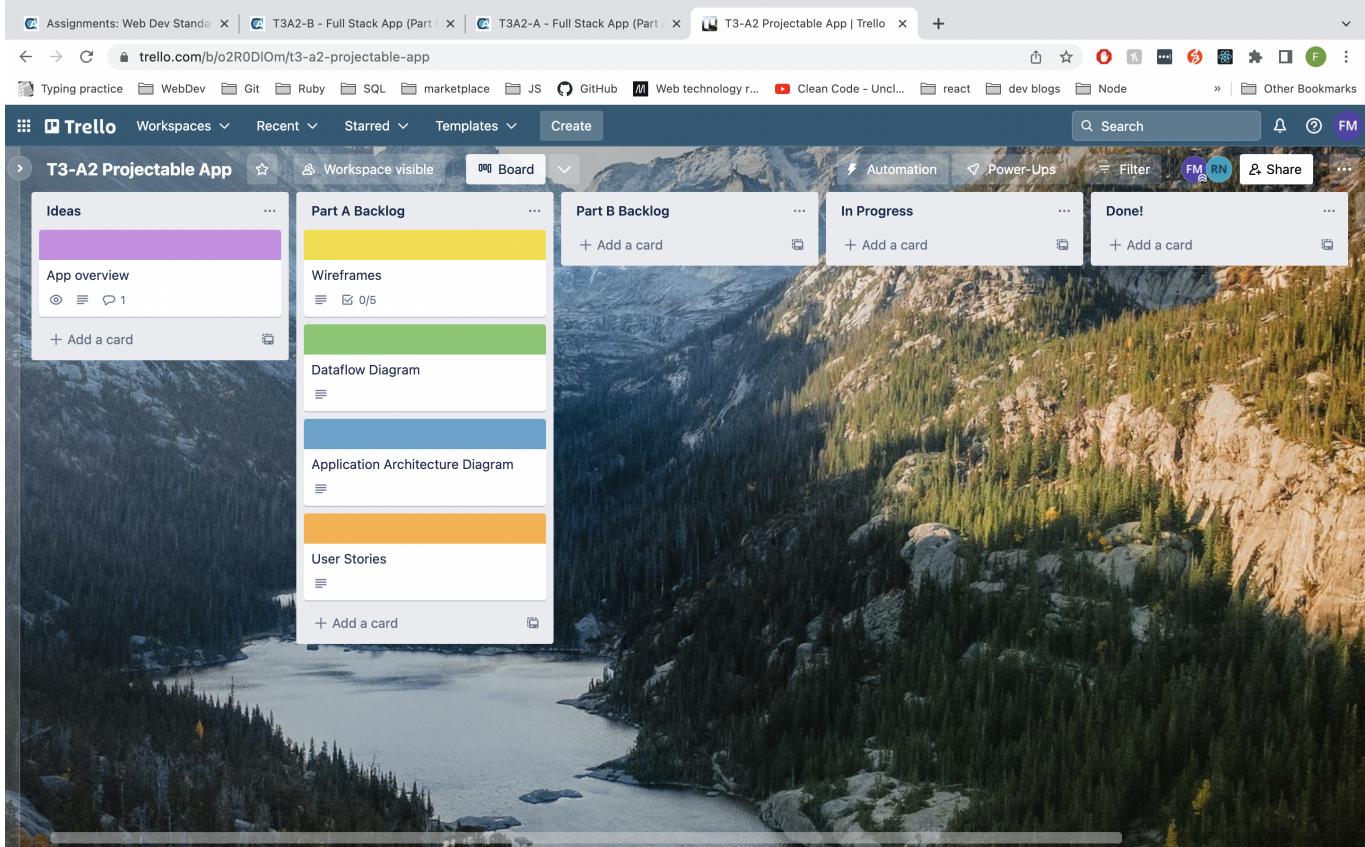
## Project Management

A Trello board has been chosen to track the progress of the project. Additionally, daily meetings have been conducted to discuss and plan the work for the day, before adding cards to the Trello board and assigning tasks to members. Meetings have involved both conference calls and discussion via Discord messages and have been conducted on an ad hoc basis.

**Link to the Projectable Board**

<https://trello.com/b/o2R0DlOm/t3-a2-projectable-app>

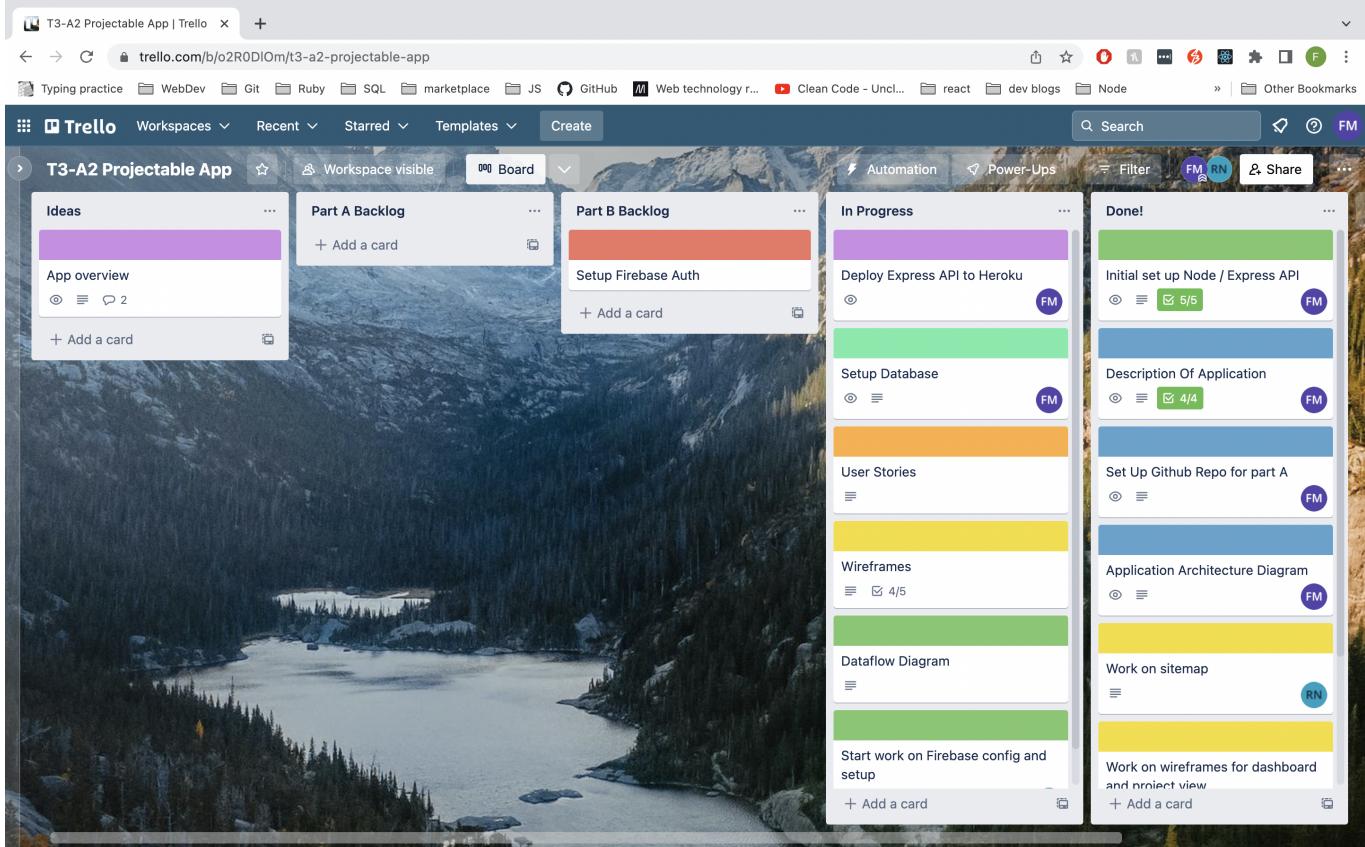
**Progress 19th of October 22**



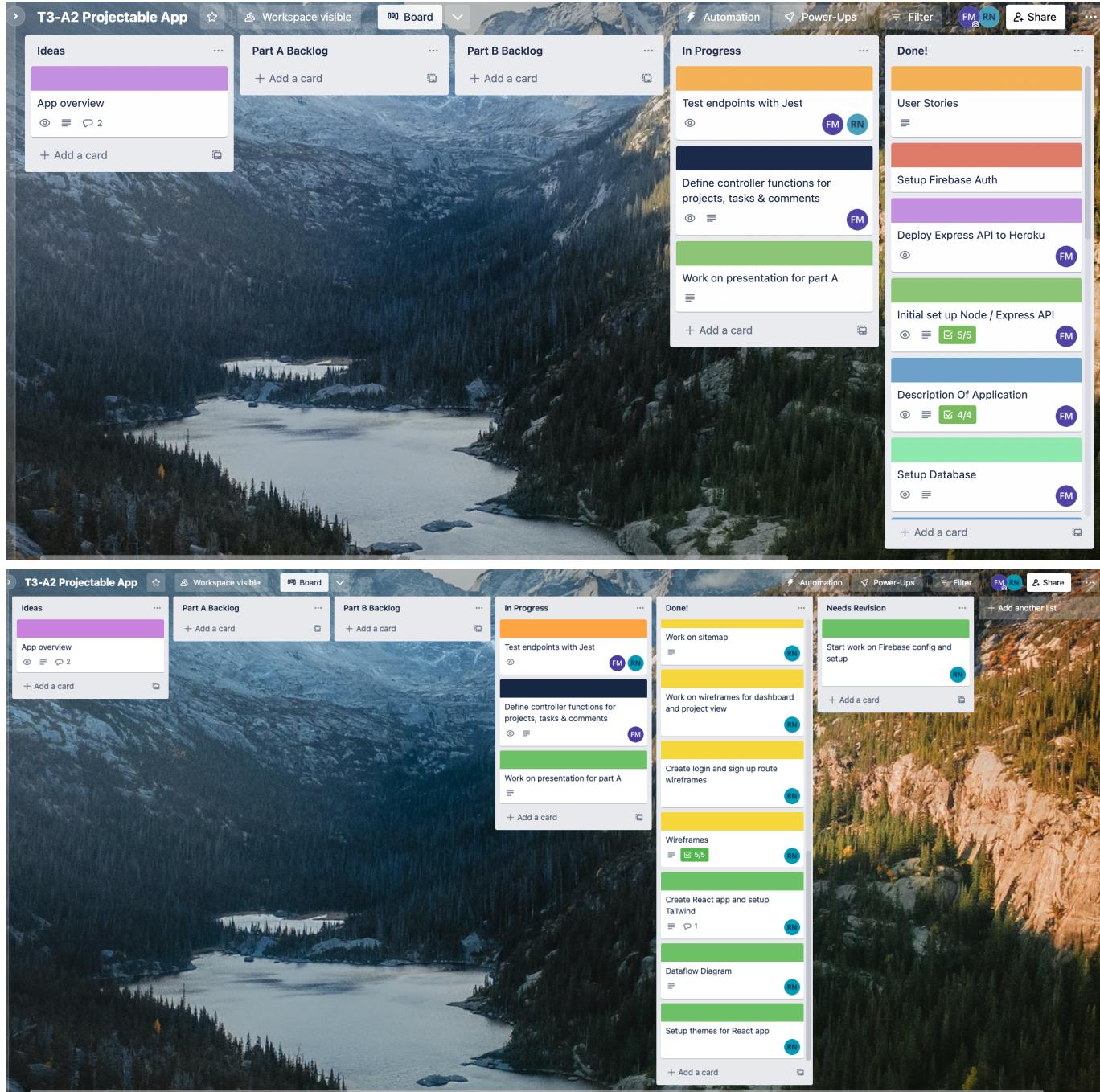
Progress 24th of October 22

The screenshot shows a Trello board titled "T3-A2 Projectable App". The board has several lists: "Ideas", "Part A Backlog", "Part B Backlog", "In Progress", and "Done!". The "In Progress" list contains cards for "Description Of Application", "Application Architecture Diagram", "Set Up Github Repo", "Work on wireframes for dashboard and project view", "Work on sitemap", and "Create login and sign up route". The "Work on sitemap" card is currently selected, showing its details: "in list In Progress", "Members" (with a "RN" member), "Description" (Create diagram to indicate the various paths traversable by the user in the app), "Activity" (with a comment input field), and a "Comments" section. To the right of the card, there is a sidebar with options like "Suggested", "Add to card", "Checklist", "Dates", "Attachment", "Custom Fields", "Power-Ups", "Automation", and "Actions".

Progress 29th of October



## Progress 6th of November



## Reference List

Prossack, A 2021, 5 Statistics Employers Need To Know About The Remote Workforce, Forbes, viewed 25 October 2022, <https://www.forbes.com/sites/ashiraprossack1/2021/02/10/5-statistics-employers-need-to-know-about-the-remote-workforce/?sh=733a65fb655d>.

TeamStage 2020, 31 Pivotal Project Management Statistics for 2021, TeamStage, viewed 25 October 2022, <https://teamstage.io/project-management-statistics/>.